

# **BRONZE PEDESTAL ROTARY GEAR PUMPS**

## **GEAR PUMPS SERIES N1000**



# **FEATURES**

- · Bronze Corrosion Resistant Castings
- Special Cast Bronze Gears
- Stainless Steel Shafts & Fasteners
- Formed Ring Seal Packing (Lip & Mechanical Seals on Special Order)
- Heavy Duty Carbon Bearings (Self Lubricating)
- Positive Displacement Flow

## **DRIVE**

Either direct drive with flexible coupling or pulley drive can be used. Make sure both flexible coupling halves are properly aligned. When using a pulley, do not overtighten the belt. Also, to absorb belt side thrust at higher pressures and larger size pumps, an external ball bearing support is recommended -- consult factory.

# LIQUIDS AND TEMPERATURE

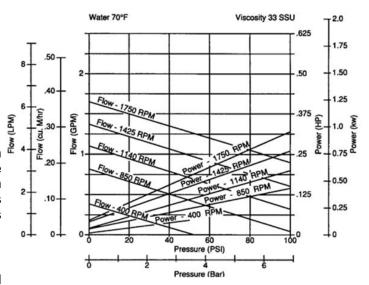
Service life will be increased substantially if the liquid pumped is clean and has some degree of lubricity. These positive displacement pumps have tight tolerances. Fine abrasives like sand, silt, or powders in suspension will accelerate pump wear and reduce throughput.

Liquids compatible with bronze and stainless steel can be pumped providing proper seal has been specified (see chemical compatibility or check factory). When possible, flush the pump after each usage.

Temperature extremes are detrimental to service life and should be avoided. Basic metals of construction allow a temperature range of -40 to 400°F. Some lip and mechanical seal elastomers have a limit of 212°F. (see engineering data or check factory). Allowing a liquid to freeze in the pump can cause damage.

#### **PERFORMANCE**

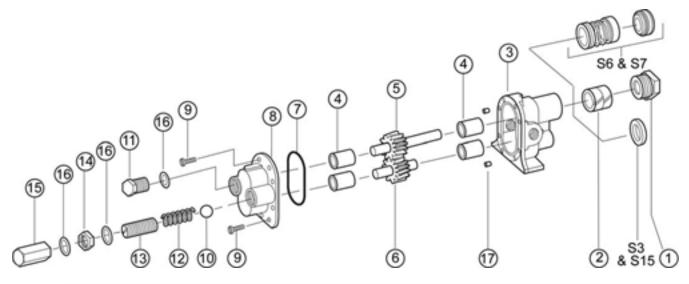
Close tolerances and the positive pumping action make the rotary gear pump capable of lifting water on the suction side as high as 20 feet. Though gear pumps are self priming, a foot valve is recommended. If possible, wet the gears with liquid to be pumped for the first dry start. Liquid retained in the system and gear chambers serves to "wet" the pump on subsequent starts.



# **SUCTION LIFT**

Close tolerances and the positive pumping action make the rotary gear pump capable of lifting water on the suction side as high as 20 feet. Though gear pumps are self priming, a foot valve is recommended. If possible, wet the gears with liquid to be pumped for the first dry start. Liquid retained in the system and gear chambers serves to "wet" the pump on subsequent starts.

# **EXPLODED VIEW AND PARTS LIST**

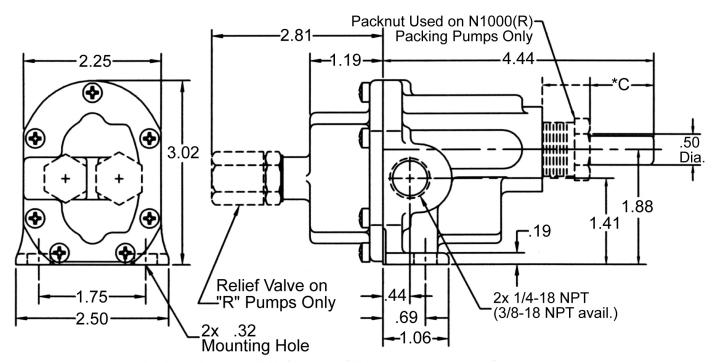


	Seal Arrangement	1	2		3	4	5	6	7	8	9	10	11	12	13	14	15
		Packnut or Retaining Ring	Packing	Seal	Body	Bearing	Drive Gear Assy	Idle Gear Assy	O-Ring	Cover	Screw	Ball	Plug Nut	Spring	Adjust. Screw	Locknut	Bypass Nut
Model		Qty. 1	Qty. 2	Qty. 1	Qty. 1	Qty. 4	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 7	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1	Qty. 1
N1000	Packing	1892	5481	NA	9311NB1N	5024	32101	32110	9797-033	9314NN5N	5385						
N1000S3	Buna Lip	NA	NA	5007	9311NB2N	5024	32101	32110	9797-033	9314NN5N	5385						
N1000S5	Viton Lip	NA	NA	7580	9311NB2N	5024	32101	32110	9797-033	9314NN5N	5385						
N1000S16	Buna Bellows Mech.	7639	NA	32584	9370NB4N	5024	32687	32110	9797-033	9314NN5N	5385						
N1000S17	Viton Bellows Mech.	7639	NA	32585	9370NB4N	5024	32687	32110	9797-033	9314NN5N	5385						
N1000S8	Teflon Wedge Mech.	7639	NA	32335	9370NB6N	5024	32687	32110	9797-033	9314NN5N	5385						
Relief Valve Versions: N1000R, N1000RS3, N1000RS5, N1000RS16, N1000S17, N1000S8 9314NN5N								5809	5775	5806	5766	5774	5767				

	16	17	18	19	
	Fiber Washer	Dowel Pin	Retaining Pin	Pipe Plug	Repair Kit*
Model	Qty. 3	Qty. 2	Qty. 1	Qty. 1	
N1000		8885			10635
N1000S3		8885			11266
N1000S5		8885			11396
N1000S16		8885	5373		11925
N1000S17		8885	5373		12104
N1000S8		8885	5373	6052	11283
Relief Valve Versions	6966			6052	

 $<sup>^{\</sup>ast}$  All Repair Kits contain items 2, 4, 5, 6, 7

# **DIMENSIONS**



\*C Dim: 1.03 for Packing Pumps, 1.18 for S3 & S5 Lip Seals, 1.51 for S16 & S17 Mech. Seals

# **ROTATION**

